ERC team ahead of schedule with pipe removal

A 16-month effort to remove 17,000 feet of steel piping at the D/DR remediation site will be completed a month ahead of schedule with no radiological or lost-workday accidents. The site includes contaminated areas around the obsolete D and DR Reactors in the 100 Area.

RCI Environmental, a subcontractor to Bechtel Hanford, Inc., will finish the job this month. BHI is the Department of Energy's Environmental Restoration Contractor for Hanford, with primary responsibility for restoring the river corridor.

The pipe removal is part of a larger ERC remediation effort that has been under way at the two reactor areas since November 1996. A total of 690,000 tons of contaminated soil and material has been removed from the D/DR site. Excavations will be backfilled with clean material by February 2001, the expected completion date that's five months ahead of the Tri-Party Agreement milestone.

Removal of 17,000 feet of steel piping will be completed nearly a month ahead of schedule by Bechtel Hanford subcontractor RCI Environmental. When D and DR Reactors were operating, the piping was used to carry contaminated water from the reactors to retention basins.

The piping, most of which is 60 inches in diameter, was used from 1950 to 1967 to carry contaminated water underground from the D and DR Reactors to retention basins. Employees have had to overcome several challenges to achieve their ahead-of-schedule and safe record. These included controlling the spread of contamination and minimizing the generation of new waste from the disposal efforts.

Removing the pipe required employees to excavate the soil around the pipe by machine and by hand. But employees had to be careful to not disturb contamination that loosely adhered to the rust inside the pipes. "It was a big change from the contamination we had been excavating for the past two years," said Alvin Langstaff, task lead for 100 D/DR Remedial Action. "That contamination is tightly bound to the soil. The contamination in the rust required additional controls to prevent spread by wind and water."

Major challenges in excavating the 60-inch-diameter piping included containing contamination-bearing rust from inside the pipe and asbestos cladding from outside the pipe.

To minimize airborne contamination, employees relied on a water misting wand rather than a stream of water. Soil cofferdams also were built around the work area to contain the water.

Another challenge the employees overcame was the removal of asbestos cladding so that the piping could be cut into smaller pieces for disposal. Crews removed a 2-foot strip of asbestos-containing material every 30 feet where the pipe was then cut. Each section was subsequently cut into three lengthwise pieces and again into 15-foot lengths. The pipe was disposed of in the Environmental Restoration Disposal Facility.

Pipe is concurrently being removed at the H Reactor remediation site and the work will be completed this fall. Next fiscal year, crews will begin to remove the pipe at the B/C remediation site. ✦